

**From:** [Robert Neely](#)  
**To:** [Burt Shephard/R10/USEPA/US@EPA](#)  
**Cc:** [Ben Meyer](#); [Chip Humphrey/R10/USEPA/US@EPA](#); [Eric Blischke/R10/USEPA/US@EPA](#); [Genevieve Angle](#); [Katherine Pease](#); [Mary Baker](#); [Megan Callahan-Grant](#); [Nancy Munn](#)  
**Subject:** Re: EPA spreadsheet with summary results of the Portland Harbor baseline ecological risk assessment (BERA)  
**Date:** 04/06/2010 04:25 PM  
**Attachments:** [robert\\_neely.vcf](#)

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Good point, Burt. So a more meaningful, or at least another way to do it would be by percentage of total LOEs per contaminant that exceed an HQ. For example, if there are 20 lines of evidence for contaminant x and HQs >1 on six of those LOEs, then you'd characterize that as falling into the 25-50 percent bin, or something along those lines. Would be easy to do if I had a summary of number of LOEs/contaminant. Perhaps that information is in your table but it's not jumping out at me. Not a big deal, though.

So I'll check on the dial in number for you.

R

Shephard.Burt@epamail.epa.gov wrote:

> Hey Rob,  
>  
> Two things. One, what's the call in number for the meeting between  
> Trustees and LWG tomorrow?  
>  
> Second, nice job with the binning, but I wanted to bring up a point  
> you're aware of, but some of the other NOAA folks probably aren't aware  
> of. Not all of the chemicals were evaluated in all lines of evidence in  
> the BERA. One specific example of this that may tend to underestimate  
> the importance of a group of chemicals is for PAHs. None of the aquatic  
> tissue lines of evidence were screened against tissue-based TRVs, as we  
> felt we could not derive reliable tissue TRVs for PAH compounds. Thus,  
> the importance of PAHs to site risks may be greater than indicated by  
> the relatively low number of times some of the PAH compounds show up as  
> chemicals of concern.

> Best regards,

> Burt Shephard  
> Risk Evaluation Unit  
> Office of Environmental Assessment (OEA-095)  
> U.S. Environmental Protection Agency, Region 10  
> 1200 6th Avenue  
> Seattle, WA 98101

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> e-mail: Shephard.Burt@epa.gov

> "If your experiment needs statistics to analyze the results, then you  
> ought to have done a better experiment"  
> - Ernest Rutherford

>  
> From: Robert Neely <Robert.Neely@noaa.gov>  
>  
> To: Burt Shephard/R10/USEPA/US@EPA  
>  
> Cc: Ben Meyer <Ben.Meyer@noaa.gov>, Chip Humphrey/R10/USEPA/US@EPA, Eric  
Blischke/R10/USEPA/US@EPA,  
> Genevieve Angle <Genevieve.Angle@noaa.gov>, Katherine Pease  
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Munn  
<Nancy.Munn@noaa.gov>  
>  
> Date: 04/06/2010 03:42 PM  
>  
> Subject: Re: EPA spreadsheet with summary results of the Portland Harbor baseline ecological  
risk assessment  
> (BERA)

> Thanks Burt.

> Hey Gang -- I did a really crude binning of Burt's work and  
> characterized each contaminant by which bin it falls into (a bin being  
> the number of LOEs for a given contaminant that exceed an HQ). It's not  
> intended to say anything about risk to salmonids specifically, just  
> helps to see which chemicals are likely to be problems in a general  
> sense.

> R

> Shephard.Burt@epamail.epa.gov wrote:

>> Rob,

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>>
>> As we discussed on this morning's call, attached is the spreadsheet
>>
> I've
>
>> been compiling of what I believe the chemicals of ecological concern
>> (i.e. chemicals with hazard quotients greater than or equal to 1.0)
>> should be in the BERA. The attached is not quite complete,
>> specifically, I have not calculated hazard quotients for generic
>> sediment quality benchmarks that are in organic carbon normalized
>> concentration units. These are mostly some of the PAHs, legacy
>> insecticides, and a few of the semivolatiles such as phthalates and
>> chlorinated benzenes. I have calculated hazard quotients for the
>> generic sediment quality benchmarks with units of dry weight bulk
>> sediment (usually mg/kg or µg/kg, some of the dioxins/furans are
>>
> ng/kg),
>
>> as these were not presented in the BERA anywhere I can find.
>>
>> I also haven't checked all of the Round 3 data that was not available
>> for screening in the screening level ecological risk assessment, but
>> have checked the Round 3 surface water, sediment, and fish tissues.
>> This added a few new chemicals not identified in the screening level
>> ecological risk assessment, such as tributyltin in surface water.
>>
> There
>
>> may be a few additional chemicals that get added to the list of
>> chemicals of concern at the conclusion of the BERA, but the attached
>> should cover the vast majority of them, and likely has all of the
>> chemicals with the largest hazard quotients in the list of chemicals
>>
> of
>
>> concern.
>>
>> The spreadsheet also has summaries of the number of chemicals of
>>
> concern
>
>> for each line of evidence in the BERA (Row 110), as well as the number
>> of lines of evidence for which each chemical of concern has a maximum
>> hazard quotient greater than 1.0 (Column BT).
>>
>> Give me a call if you have questions.
>>
>> Best regards,
>>
>> Burt Shephard
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>>
>> "If your experiment needs statistics to analyze the results, then you
>> ought to have done a better experiment"
>> - Ernest Rutherford
>>
>> (See attached file: Summary of BERA HQs.xlsx)
>>
>
> --
> Robert Neely
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>
> [attachment "2010-04-06_PHSummaryBERAHQsLOE.xlsx" deleted by Burt
> Shephard/R10/USEPA/US] [attachment "robert_neely.vcf" deleted by Burt
> Shephard/R10/USEPA/US]
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